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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,651	08/27/1999	MICHAEL GREMINGER	TSW-31949	9479
116	7590	11/23/2007	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			FAULK, DEVONA E	
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/385,651	GREMINGER, MICHAEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 22 May 2007 and 31 July 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1,12-23 and 25-28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,12-23 and 25-28 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 28 July 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/2007 has been entered.

### ***Response to Remarks***

2. The applicant has amended the claims. The applicant asserts that the prior art or combination thereof fails to discloses newly recited " a storage device for storing a plurality of assessment data and previously experienced audio track data". The examiner asserts that the newly recited language constitutes new matter.
3. The applicant filed a supplemental amendment on 7/31/2007 that amended claim 23. The applicant asserts that the prior art fails to teach of storing appraisals. The examiner asserts that Basseas discloses storing appraisals (column 4, lines 14-40; the user enters his/her response by entering a number which corresponds to a sound level of a test signal, the number is stored).
4. Claims 2-11 are cancelled and claim 24 is withdrawn. Claims 25-28 are new claims.
5. The examiner had an applicant-initiated interview with Robert Bodi on 7/25/2007. We discussed possible amended claim language. The examiner noted that the

amendment would need to point to where the newly recited language was disclosed in the specification.

***Specification***

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 1,20 and 22 recite ““ a storage device for storing ....and previously experienced audio track data”. Claim 23 recites “... for storing as appraisals...”. There is lack of antecedent basis for this claim language.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1,12-23,25-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1,20 and 22 recite “ a storage device for storing a plurality of assessment data and previously experienced

audio track data". The examiner could not find where the specification disclosed that a storage device that stores previously experienced audio track data.

## ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1,12-15,17,19,20-22,26-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moser et al. (WO 85/00509) in view of Engebreston et al. (US 4,548,082) in further view of Delisle et al. (US 3,809,811).

Regarding **claim 1**, Moser discloses an apparatus for fitting a hearing device fitting device (Figure 1, Figure 16) comprising:

a data entry device (human interfaces 68 and 70 Figure 1; 370 Figure 16);  
a computing device (308, Figure 16), (connected on an input side with a  
connection for connecting to said data entry device (human interfaces 68 and 70  
Figure 1; 370 Figure 16) and

further comprising an audio storage medium play-back unit storing a plurality of audio tracks (Moser teaches that the CD stores digital test signals ; page 14, lines 23-25; track is defined as a distinct selection of music from a recording or a compact disc) and having a control input connected to another output of said computing device output (Figure 16) and having an audio output

connectable to a loudspeaker unit input (310, Figure 16) (pages 28, line 27-page 30).

wherein said computing device selects another one of said audio tracks including audio signals (Moser teaches that the test signals stored as on the CD 304 may be reproduced upon selection by the common unit (370); page 30 ,lines 18-11;page 19, lin3 21-page 20, line 5).

a control signal at said output depending on data input to said connection for data entry (page 29, lines 23-30).

Moser in Figure 16 discloses communication between the control unit and the hearing aid and of assessment data entered into said data entry device (page 30 ,lines 18-11;page 19, lin3 21-page 20, line 5).

Moser fails to disclose a computing device having an output side with a connection for a hearing device and assessment data entered into said data entry device based on perceptions of a user wearing said hearing device listening to said audio tracks and that the storage device stores previously experienced audio track data.

Engebreston discloses a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) , of assessment data entered into said data entry device based on perceptions of said individual wearing said hearing device and listening to said audio tracks with said assessment data being stored in said storage device and of computing a control signal based on said assessment data, wherein said

control signal is applied to said other output of said computing device (column 7, lines 10-20; Engebreston teaches that a repertoire of sound are stored on the disc including tones and that the patient can communicate his response to the data using the IRU and this reads on storing previously experienced audio track data).

It would have been obvious to modify Moser so that the output of the control unit is connected to a hearing device and to have assessment data entered into said data entry device based on perceptions of a user wearing a hearing device listening to audio tracks as taught by Engebreston in order to automatically control the characteristics of the hearing aid (Engebreston, column 6, lines 46-48).

Moser as modified by Engebreston fails to teach of automatic selection of test signals based on user response.

Delisle discloses a system for automatically an audiometric test wherein, based on the user's response (control signal) , the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Moser as modified by Engebreston to have automatic selection of the test signals or test tones based on the user response in order to provide hearing testing that is completely managed by a computer program without the intervention of an operator.

Regarding **claim 12**, Moser as modified by Engebreston and Delisle discloses wherein said playback unit contains at least one audio storage chip Moser teaches of the playback unit as a compact disc player (52). He further teaches that the information stored on the compact disc (54) is listed in a stored table of contents (page 18, lines 30-33). There is therefore implicitly some sort of audio storage chip as claimed.

Regarding **claim 13**, Moser as modified by Engebreston and Delisle wherein said playback unit is a CD playback unit. Moser teaches of the playback unit as a compact disc player (302). He further teaches that the information stored on the compact disc (304) is listed in a stored table of contents (page 28, lines 28-35).

Regarding **claim 15**, Moser as modified by Engebreston and Delisle discloses further comprising a decoding unit, wherein said playback unit is an audio CD playback unit generating a specification of an extent of at least one of the segments on the audio storage medium in said playback unit, and wherein said specification is fed from an output of said playback unit to said decoding unit which then generates a control signal for the operation of said playback unit (Figure 16, page 28, line30-page 29, line 30).

Regarding **claim 16**, Moser as modified by Engebreston and Delisle discloses the hearing device fitting device according to claim 1, wherein said fitting device further comprises a set-value comparing unit having an output

operationally connected to a level control input of said playback unit for controlling said audio –output (page 25, lines 2-7), wherein the hearing device is connected to said hearing device output, the hearing device having a level detector (350, Figure 16) which is connected to an acoustical/electrical converter of the hearing device, such that said computing unit generates, on a level detector control output, a level detector control signal for controlling an operational connection between a level detector output of said level detector and a computing unit control input of said computing unit, said computing unit control input also operationally connected to said set-value comparing unit, and wherein

    said computing unit enables said playback unit for playback of a predetermined storage segment of the audio storage medium upon receipt of a control signal on said computing unit control input (Figure 16, page 29, lines 17-30) , and further wherein

    said computing unit controls establishing said operational connection of said level detector output to said computing unit control input (Figure 16, page 29, lines 17-30)

Regarding **claim 17**, Moser as modified by Engebreston and Delisle discloses said computing unit further including a selection unit (Moser, X-Y tablet 68; page 15, lines 23-30; Figure 1), wherein said connection for data entry is connected to a human input device and is operationally connected with said selection unit, a selection output of said selection unit being operationally

connected to said selection input of said playback unit (page 29, lines 23-30; Figure 1 and Figure 16).

Regarding **claim 19**, Moser as modified by Engebreston and Delisle discloses wherein said connection for data entry is connected to a human input device and to a decoding unit (disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27) which generates, from input data from said human input device, according to stored decoding tables, output data to an output of said decoding unit that is operationally connected with another input of said computing unit ((disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27; Figure 16, page 29, lines 23-30 ).

**Claim 26** is comprehended by the rejection of claim 1.

**Claims 20 and 22** share common elements.

Regarding **claims 20 and 22**, Moser discloses a hearing device fitting arrangement (Figure 1 and Figure 16) comprising:

an audio storage playback unit (302,304, Figure 16) including:  
an audio storage medium having a plurality of storage segments each form storing audio signals representing common daily experiences (Moser teaches that the CD stores digital test signals ; page 14, lines 23-25; track is defined as a distinct selection of music from a recording or a compact disc; pages 29, line 23-30);

a control input having a selection input for selecting any of a plurality of said storage segments (page 29, lines 23-30); and

    an audio output( speaker 310) ;

    a loudspeaker operationally connectable to said audio output of said playback unit (310, Figure 16); and

    a computing unit (308) including:

        a data input for data entry (370) by an individual carrying said hearing device to be fitted ;

        a hearing device output for operationally connecting to the hearing device (312);

        and an audio control output for operationally connecting to said control input of said audio storage medium playback unit(Figure 16);

    wherein said computing unit is adapted for selecting another one of the plurality of storage segments (page 28, lines 28-page 29).

    The only difference between claim 20 and 22 is that claim 22 recites " a hearing device output for operationally connecting to the hearing device for programming said hearing device" where claim 20 recites "a hearing device output for operationally connecting to the hearing device".

    Moser in Figure 16 discloses communication between the control unit and the hearing aid. Moser in Figure 16 discloses communication between the control unit and the hearing aid and of assessment data entered into said data

entry device (page 30 ,lines 18-11;page 19, line 21-page 20, line 5). Moser discloses that the CD has test signals on it.

Moser fails to disclose a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) and that said data input for said individual to input assessment data for assessing said hearing aid during playback of one of said storage segments and selecting depending on said assessment data entered by user and that the storage device stores previously experienced audio track data.

Engebreston discloses a computing device having an output side with a connection for a hearing device (Figure 1; output side connected to hearing aid worn by patient) , of assessment data entered into said data entry device based on perceptions of said individual wearing said hearing device and listening to said audio tracks with said assessment data being stored in said storage device and of computing a control signal based on said assessment data, wherein said control signal is applied to said other output of said computing device (column 7, lines 10-20; Engebreston teaches that a repertoire of sound are stored on the disc including tones and that the patient can communicate his response to the data using the IRU and this reads on storing previously experienced audio track data).

It would have been obvious to modify Moser so that the output of the control unit is connected to a hearing device and to have assessment data entered into said data entry device to input assessment data for assessing

hearing aid during playback as taught by Engebreston in order to control the characteristics of the hearing aid (Engebreston, column 6, lines 46-48).

Moser as modified by Engebreston fails to explicitly teach of automatic selection of test signals based on user response.

Delisle discloses a system for automatically an audiometric test wherein, based on the user's response, the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Moser as modified by Engebreston to have automatic selection of the test signals or test tones based on the user response in order to provide hearing testing that is completely managed by a computer program without the intervention of an operator.

Regarding **claim 21**, Moser as modified by Engebreston and Delisle discloses wherein said connection for data entry is connected to a human input device and to a decoding unit (disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27) which generates, from input data from said human input device, according to stored decoding tables, output data to an output of said decoding unit that is operationally connected with another input of said computing unit ((disc player 52, Figures 13-15 and 302 in Figure 16; page 18, lines 18-27; Figure 16, page 29, lines 23-30 ).

**Claims 27 and 28** are comprehended by the rejection of claims 20 and 22.

11. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Moser et al. (WO 85/00509) as applied above to claim 1 and Engebreston et al. (US 4,548,082) as applied above to claim 1 and Delisle et al. (US 3,809,811) as applied above to claim 1, in further view of Geiger (US 4,807,208).

Regarding claim 14, Moser as modified by Engebreston and Delisle fails to disclose but Geiger teaches of further comprising a comparer unit that tests the audio storage medium in said playback unit for a predetermined identification and which disables said playback unit on non-recognition of said predetermined identification (column 3, lines 18-27 and lines 30-34). It would have been obvious to modify Moser as modified by Engebreston and Delisle by having a test that determines if the audio storage medium matches some predetermined identification as taught by Geiger so that only desired marked pieces will be played (Geiger; column 3, lines 25-34)

12. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Basseas (U.S. Patent 6,674,867) as modified by Delisle et al. (US 3,809,811).

Regarding **claim 23**, Basseas discloses a method for fitting a hearing device insitu (insitu is defined as in its natural position) (Figure 1) comprising the steps of:

applying a hearing device to an individual (Figure 1);  
subjecting the individual to a plurality of audio test signals (column 4, lines 11-17);

having the individual appraise each of said audio test signals for storing as appraisals (column 4, lines 18-40; the user enters his/her response by entering a number which corresponds to a sound level of a test signal, the number is stored);

and selecting, in dependency of said appraising, a subsequent audio test signal (column 2, lines 36-48) (column 4, lines 5-column 5).

Basseas fails to explicitly teach of automatic selection of test signals based on user response and the stored appraisals.

Delisle discloses a system for automatically selecting an audiometric test wherein, based on the user's response, the apparatus will continue the test utilizing a different amplitude level for the same tone frequency or continue the test using a different tone frequency (abstract).

It would have been obvious to modify Basseas to have automatic selection of the test signals or test tones based on the user response and the stored appraisals in order to provide hearing testing that is completely managed by a computer program without the need for intervention by an operator.

**Claim 25** is comprehended by the rejection of claim 23.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/15/07